

**REMARKS**

Claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 remain pending in the application.

The Applicants respectfully request the Examiner to reconsider earlier rejections in light of the following remarks. No new issues are raised nor is further search required as a result of the changes made herein. Entry of the Amendment is respectfully requested.

**Claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 over Tal and Old and Well-Known Prior Art**

In the Office Action, claims 1-3, 6, 8, 10-12, 15, 17, 19-21, 24 and 26 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,662,254 to Tal et al. ("Tal"), with claims 5, 7, 14, 16, 23 and 25 rejected under 35 U.S.C. §103(a) as allegedly being obvious over Tal in view of old and well-known prior art ("OWKPA"). The Applicants respectfully traverse the rejection.

Claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 a method and apparatus relying on a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application.

The Examiner acknowledges that Tal fails to disclose a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application, as recited by claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 (See Office Action, page 4). However, the Examiner alleges that "it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ any particular number of duplex serial lines depending on a bandwidth requirement of a particular application, since using a particular number of duplex serial lines (depending on a bandwidth requirement for a particular application) is clearly a matter of design choice; and only involves ordinary skill in the art" (See Office Action, page 4). The Applicants respectfully disagree.

Providing a plurality of data paths to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application is NOT a matter of design choice since providing significant advantages over the cited prior art. Scalability of data paths connecting a first half bridge circuit and a second half bridge circuit allows use of a reduced number of data paths in less demanding applications that provides, e.g., a power savings that is an important consideration in battery driven circuits. Moreover, scalability of data paths connecting a first half bridge circuit and a second half bridge circuit allows use of a reduced number of data paths in less demanding applications that, e.g., frees data paths for dedicated transmission of data in an opposite direction for application using bi-directional communications. The cited prior art fails to disclose or suggest scalability, much less disclose or suggest the claimed features having such benefits.

Moreover, modifying the cited prior art to arrive at the claimed features only involving ordinary skill in the art is NOT a test of patentability, i.e., patentability does not depend on if a modification of the prior art involves a skill beyond that of ordinary skill in the art. The test for patentability is if the cited prior art discloses the claimed features and if the claimed features are obvious in view of the cited prior art. The Examiner acknowledges the cited prior art fails to disclose the claimed features. The claimed features are NOT obvious in view of the cited prior art since the cited prior art fails to disclose or suggest any need, i.e., motivation, for such a modification. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Therefore, even modifying Tal with OWKPA, if it were obvious which it is not, fails to disclose or suggest a method and apparatus relying on a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application, as recited by claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26.

Accordingly, for at least all the above reasons, claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

**Claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 over Nakamura and Old and Well-Known Prior Art**

In the Office Action, claims 1-3, 6, 8, 10-12, 15, 17, 19-21, 24 and 26 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,606,678 to Nakamura ("Nakamura"), with claims 5, 7, 14, 16, 23 and 25 rejected under 35 U.S.C. §103(a) as allegedly being obvious over Nakamura in view of old and well-known prior art ("OWKPA"). The Applicants respectfully traverse the rejection.

Claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 recite a method and apparatus relying on a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application.

The Examiner acknowledges that Nakamura fails to disclose a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application, as recited by claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 (See Office Action, pages 6). However, the Examiner alleges that "it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ any particular number of duplex serial lines depending on a bandwidth requirement of a particular application, since using a particular number of duplex serial lines (depending on a bandwidth requirement for a particular application) is clearly a matter of design choice; and only involves ordinary skill in the art" (See Office Action, page 7). The Applicants respectfully disagree.

As discussed above, providing a plurality of data paths to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application is NOT a matter of design choice since providing significant advantages over the cited prior art.

Scalability of data paths connecting a first half bridge circuit and a second half bridge circuit allows use of a reduced number of data paths in less demanding applications that provides, e.g., a power savings that is an important consideration in battery driven circuits. Moreover, scalability of data paths connecting a first half bridge circuit and a second half bridge circuit allows use of a reduced number of data paths in less demanding applications that, e.g., frees data paths for dedicated transmission of data in an opposite direction for application using bi-directional communications. The cited prior art fails to disclose or suggest scalability, much less disclose or suggest the claimed features having such benefits.

Moreover as discussed above, modifying the cited prior art to arrive at the claimed features only involving ordinary skill in the art is NOT a test of patentability, i.e., patentability does not depend on if a modification of the prior art involves a skill beyond that of ordinary skill in the art. The test for patentability is if the cited prior art discloses the claimed features and if the claimed features are obvious in view of the cited prior art. The Examiner acknowledges the cited prior art fails to disclose the claimed features. The claimed features are NOT obvious in view of the cited prior art since the cited prior art fails to disclose or suggest any need, i.e., motivation, for such a modification. “The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.” In re Fritch, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Therefore, even modifying Nakamura with OWKPA, if it were obvious which it is not, fails to disclose or suggest a method and apparatus relying on a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application, as recited by claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26.

Accordingly, for at least all the above reasons, claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

**Claims 1-3, 6, 7, 10-12, 14-16, 19-21 and 23-25 over Lange and Old and Well-Known Prior Art**

In the Office Action, claims 1-3, 10-12, 14, 19-21 and 23 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,457,091 to Lange et al. ("Lange"), with claims 6, 7k, 15, 16, 24 and 25 rejected under 35 U.S.C. §103(a) as allegedly being obvious Lange in view of old and well-known prior art ("OWKPA"). The Applicants respectfully traverse the rejection.

Claims 1-3, 6, 7, 10-12, 14-16, 19-21 and 23-25 recite a method and apparatus relying on a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application.

The Examiner acknowledges that Lange fails to disclose a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application, as recited by claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 (See Office Action, pages 9). However, the Examiner alleges that "it would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ any particular number of duplex serial lines depending on a bandwidth requirement of a particular application, since using a particular number of duplex serial lines (depending on a bandwidth requirement for a particular application) is clearly a matter of design choice; and only involves ordinary skill in the art" (See Office Action, page 9). The Applicants respectfully disagree.

As discussed above, providing a plurality of data paths to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application is NOT a matter of design choice since providing significant advantages over the cited prior art. Scalability of data paths connecting a first half bridge circuit and a second half bridge circuit allows use of a reduced number of data paths in less demanding applications that provides, e.g., a power savings that is an important

consideration in battery driven circuits. Moreover, scalability of data paths connecting a first half bridge circuit and a second half bridge circuit allows use of a reduced number of data paths in less demanding applications that, e.g., frees data paths for dedicated transmission of data in an opposite direction for application using bi-directional communications. The cited prior art fails to disclose or suggest scalability, much less disclose or suggest the claimed features having such benefits.

Moreover as discussed above, modifying the cited prior art to arrive at the claimed features only involving ordinary skill in the art is NOT a test of patentability, i.e., patentability does not depend on if a modification of the prior art involves a skill beyond that of ordinary skill in the art. The test for patentability is if the cited prior art discloses the claimed features and if the claimed features are obvious in view of the cited prior art. The Examiner acknowledges the cited prior art fails to disclose the claimed features. The claimed features are NOT obvious in view of the cited prior art since the cited prior art fails to disclose or suggest any need, i.e., motivation, for such a modification. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Therefore, even modifying Lange with OWKPA, if it were obvious which it is not, fails to disclose or suggest a method and apparatus relying on a plurality of data paths used to connect a first half bridge circuit and a second half bridge circuit that are scalable depending on a bandwidth needed for a particular application, as recited by claims 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26.

Accordingly, for at least all the above reasons, claims 1-3, 6, 7, 10-12, 14-16, 19-21 and 23-25 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

**Conclusion**

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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